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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/939,005	08/24/2001	Jason D. Hibbeler	POU920010019US1	3418

23334 7590 10/07/2004	EXAMINER	
FLEIT, KAIN, GIBBONS, GUTMAN, BONGINI & BIANCO P.L. ONE BOCA COMMERCE CENTER 551 NORTHWEST 77TH STREET, SUITE 111 BOCA RATON, FL 33487	GORDON, CARLENE MICHELLE	

ART UNIT	PAPER NUMBER
2124	

DATE MAILED: 10/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	09/939,005	HIBBELER ET AL.
	Examiner	Art Unit
	Carlene Gordon	2124

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>24 August 2001</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-19</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-19</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>24 August 2001</u> is/are: a)☐ accepted or b)☒ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date <u>08/24/2001</u>.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

1.   This action is responsive to the application filed on August 24, 2001.

Claims 1-19 are pending in the application.

Oath/Declaration

2.   The Oath/Declaration is objected to because the signature of applicant

Jhy-Chun Wang has been omitted. A new Oath is required. See MPEP § 602.

Drawings

3.   The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5)

because they include the following reference character(s) not mentioned in the

description:

Fig. 4B reference 432.

Fig. 7 reference 702.

Corrected drawing sheets in compliance with 37 CFR 1.121(d), or

amendment to the specification to add the reference character(s) in the

description in compliance with 37 CFR 1.121(b) are required in reply to the Office

action to avoid abandonment of the application. Any amended replacement

drawing sheet should include all of the figures appearing on the immediate prior

version of the sheet, even if only one figure is being amended. The replacement

sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37

CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the

changes are not accepted by the examiner, the applicant will be notified and

informed of any required corrective action in the next Office action. The objection

to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

4.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for

all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described
> as set forth in section 102 of this title, if the differences between the subject matter sought to
> be patented and the prior art are such that the subject matter as a whole would have been
> obvious at the time the invention was made to a person having ordinary skill in the art to which
> said subject matter pertains. Patentability shall not be negatived by the manner in which the
> invention was made.

5.   Claims 1-8, and 9-16 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Ingles (A Parallel Tools Consortium Project: Dynamic Probe

Class Library), hereafter "**Ingles**", and further in view of Lawrence Livermore

National Laboratory (Performance Analysis Tools), hereafter "**LLNL**".

6.   As to claim 1:

Ingles discloses using DPCL (Dynamic Probe Class Library)

instrumentation for; selecting at least one function and/or CPU usage in a target

application to be traced (pg. 1, "tools that provide information about CPU and

functional unit usage");

attaching instrumentation to the at least one function or CPU usage (pg. 3,

"place probes at specific locations"); and

running at least part of the target application (pg. 3, "while application is running").

Ingles does not expressly disclose that the instrumentation being attached is a –p and/or –pg flag; however, discloses that the DPCL is designed to support performance analysis tools (pg. 1, "What is DPCL?"). Also, Ingles does not expressly disclose writing one or more results of the at least one function and/or CPU usage with the attached -p and/or -pg flag in a gmon.out format.

However, LLNL discloses in analogous art of performance analysis tools using the –p and –pg option for profiling applications (Table of Contents, #4 *see sections 1 and 2*, "-p option" and "-pg option"). Also LLNL discloses writing results in gmon.out format (Table of Contents, #4 *see sections 1 and 2*, "-p option" and "-pg option").

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to use the –p and/or –pg flag provided by the -p or -pg option and writing the result in a gmon.out format as disclosed by LLNL in combination with the Dynamic Probe Class Library instrumentation of Ingles. The motivation for doing so would have been because the -p and –pg flags compile and link the application so that the runtime statistics of the CPU and function usage can be presented in an output format, such as the gmon.out format when the -pg flag is used as suggested by LLNL (Table of Contents, #4 *see sections 1 and 2*, "-p option" and "-pg option").

7.   As to claim 2:

Rejection of claim 1 is incorporated and further Ingles discloses changing the selection of the at least one function and/or CPU usage placement in the target application that is already running (pg. 2 "Instrumentation... placed anywhere... anytime").

8.   As to claim 3:

Rejection of claim 1 is incorporated and further Ingles implicitly discloses stopping an the target application before the completion of the target application (pg. 3, "application terminated and restarted from the beginning").

9.   As to claim 4:

Rejection of claim 1 is incorporated and further Ingles discloses adding or deleting instrumentation while the target application is running (pg. 3, "Instrumentation may be added.. removed while the applications... run.").

10.   As to claim 5:

Rejection of claim 4 is incorporated and further LLNL discloses analyzing the gmon.out output file with standard characterization tools (see discussion of claim 1; and refer to LLNL: Table of Contents, #4 *see sections 1 and 2* gprof , "The gprof utility...").

11.   As to claim 6:

Rejection of claim 1 is incorporated and further claim 6 recites limitations

already discussed in connection with claim 1; therefore, claim 6 is rejected under

the rationale discussed in connection with claim 1. Furthermore, Ingles discloses

attaching instrumentation into the target application program directly and without

the use of source code for the target application (pg. 2, "DPCL works at level of

the executable image.", "... placed anywhere... anytime.").

12.   As to claim 7:

Rejection of claim 6 is incorporated and further Ingles discloses attaching

instrumentation into the target application program directly and without the need

to recompile the target application (see claim 6; pg. 2, "no need to recompile").

13.   As to claim 8:

Rejection of claim 1 is incorporated and further LLNL discloses totaling the

at least one function and/or CPU usage with a -p and/or -pg flag into a summary

register so as to provide a running total (see attached of sample gprof output

containing gmon.out file).

14.   As to claim 9:

Claim 9 recites a computer readable media corresponding to the method

of claim 1, therefore, claim 9 is rejected under the same rationale as claim 1.

As in claim 1:

Ingles discloses using DPCL (Dynamic Probe Class Library)

instrumentation for; selecting at least one function and/or CPU usage in a target

application to be traced (pg. 1, "tools that provide information about CPU and

functional unit usage");

attaching instrumentation to the at least one function or CPU usage (pg. 3,

"place probes at specific locations"); and

running at least part of the target application (pg 3, "while application is

running").

Ingles does not expressly disclose that the instrumentation being attached

is a –p and/or –pg flag; however, discloses that the DPCL is designed to support

performance analysis tools (pg. 1, "What is DPCL?"). Also, Ingles does not

expressly disclose writing one or more results of the at least one function and/or

CPU usage with the attached -p and/or -pg flag in a gmon.out format.

However, LLNL discloses using the –p and –pg option for profiling

applications (Table of Contents, #4 see sections 1 and 2, "-p option" and "-pg

option"). Also LLNL discloses writing results in gmon.out format (same).

At the time the invention was made, it would have been obvious to a

person of ordinary skill in the art to use the –p and/or –pg flag provided by the -p

or -pg option and writing the result in a gmon.out format as disclosed by LLNL in

combination with the Dynamic Probe Class Library instrumentation of Ingles.

The motivation for doing so would have been because the -p and –pg flags

compile and link the application so that the runtime statistics of the CPU and

function usage can be presented in an output format, such as the gmon.out

format when the -pg flag is used as suggested by LLNL (same).

15.   As to claim 10:

Rejection of claim 9 is incorporated and further claim 10 recites limitations

as recited in claim 2; therefore, claim 10 is rejected under the same rationale as

claim 2.

16.   As to claim 11:

Rejection of claim 9 is incorporated and further claim 11 recites limitations

as recited in claim 3; therefore, claim 11 is rejected under the same rationale as

claim 3.

17.   As to claim 12:

Rejection of claim 9 is incorporated and further claim 12 recites limitations

as recited in claim 4; therefore, claim 12 is rejected under the same rationale as

claim 4.

18.

19.   As to claim13:

Rejection of claim 12 is incorporated and further claim 13 recites

limitations as recited in claim 5; therefore, claim 13 is rejected under the same

rationale as claim 5.

20.   As to claim 14:

Rejection of claim 9 is incorporated and further claim 14 recites limitations

as recited in claim 6; therefore, claim 14 is rejected under the same rationale as

claim 6.

21.   As to claim 15:

Rejection of claim 14 is incorporated and further claim 15 recites

limitations as recited in claim 7; therefore, claim 15 is rejected under the same

rationale as claim 7.

22.   As to claim 16:

Rejection of claim 9 is incorporated and further claim 16 recites limitations

as recited in claim 8; therefore, claim 16 is rejected under the same rationale as

claim 8.

23.   Claims 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Ingles and LLNL as applied to the claims above, and further in view of

Applicant Admitted Prior Art, hereafter "**AAPA**".

24.   As to claim 17:

Claim 9 recites a system corresponding to the method of claim 1,

therefore, claim 9 is rejected under the same rationale as claim 1.

As in claim 1:

Ingles discloses using DPCL (Dynamic Probe Class Library)

instrumentation for; selecting at least one function and/or CPU usage in a target

application to be traced (pg. 1, "tools that provide information about CPU and

functional unit usage");

attaching instrumentation to the at least one function or CPU usage (pg. 3,

"place probes at specific locations"); and

running at least part of the target application (pg 3, "while application is

running").

Ingles does not expressly disclose that the instrumentation being attached

is a –p and/or –pg flag; however, discloses that the DPCL is designed to support

performance analysis tools (pg. 1, "What is DPCL?"). Also, Ingles does not

expressly disclose writing one or more results of the at least one function and/or

CPU usage with the attached -p and/or -pg flag in a gmon.out format.

However, LLNL discloses using the –p and –pg option for profiling

applications (Table of Contents, #4 *see sections 1 and 2*, "-p option" and "-pg

option"). Also LLNL discloses writing results in gmon.out format (same).

At the time the invention was made, it would have been obvious to a

person of ordinary skill in the art to use the –p and/or –pg flag provided by the -p

or -pg option and writing the result in a gmon.out format as disclosed by LLNL in

combination with the Dynamic Probe Class Library instrumentation of Ingles.

The motivation for doing so would have been because the -p and –pg flags

compile and link the application so that the runtime statistics of the CPU and

function usage can be presented in an output format, such as the gmon.out

format when the -pg flag is used as suggested by LLNL (same).

Furthermore, Ingles and LLNL do not explicitly disclose, an operating system for running a target application and a benchmark application for profiling the target application.

However, it is disclosed as AAPA to run the target application on an operating system (pg. 1 lines 27-30 "AIX") and use a benchmark application for profiling the target application (pg. 2 line 9, "benchmark, the profiler analyzes the target application").

One of ordinary skill in the art at the time of the applicant's invention would have been motivated to run the target application as taught by Ingles on an operating system and profile the target application using a benchmark application as AAPA because it is AAPA that it is well known in the art to do so (pg. 1 lines 27-30 "AIX", pg. 2 line 9, "benchmark, the profiler analyzes the target application").

25.   As to claims 18 and 19:

Rejection of claim 17 is incorporated and further Ingles implicitly teaches input device for control of the DPCL diagnostic instrumentation and for changing the DPCL diagnostic instrumentation during the operation of the target application (pg. 2-3 "DPCL supports instrumentation… to place probes").

Conclusion

26.   The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
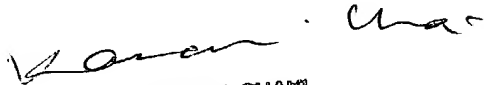
Derose et al. (The Dynamic Probe Class Library – An Infrastructure for

Developing Instrumentation for Performance Tools).

27.   Any inquiry concerning this communication or earlier communications from

the examiner should be directed to Carlene Gordon whose telephone number is

(571) 272-3722. The examiner can normally be reached on Mon.-Fri. 8:30am-

5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the

examiner's supervisor, Kakali Chaki can be reached on (571) 272-3719. The fax

phone number for the organization where this application or proceeding is

assigned is 703-872-9306.

Information regarding the status of an application may be obtained from

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KAKALI CHAKI
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

C.G. /C.D./